## CLAIMS

We claim:

1.    A method of database synchronization between a first database on a server and a second, corresponding database on a wireless computing device, comprising the steps

5    of:

generating on a wireless computing device a synchronization request message, wherein the synchronization request object includes a data object, and an action executed on the data object;

transmitting the synchronization request object from the wireless computing

10    device to a server;

validating the data object and the action on the server based upon the synchronization request message and business logic, defined by a user of the wireless computing device, corresponding to a domain of the data object;

updating a remote data storage on the server based upon the business logic;

15    generating a synchronization response message on the server based on results corresponding to the validating and the updating step;

transmitting the synchronization response message from the server to the mobile computing device; and

updating a data storage on the wireless computing device based upon the

20    synchronization response message.

2.    The method of claim 1, wherein the wireless computing device is a personal digital assistant (PDA).

25    3.    The method of claim 1, further comprising the steps of:

prior to the transmission step, determining whether or not the wireless computing device is in a on-line mode or an off-line mode; and if the wireless computing device is in a on-line mode,

proceeding to the transmitting the synchronization request message

step; or

if the wireless computing device is in a off-line mode,

placing the synchronization request message into a synchronization queue; and

5     proceeding to the transmitting the synchronization request message step once the wireless computing device is in the on-line mode.

4.    The method of claim 1, wherein the synchronization response message includes a value corresponding to the results.

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5.    The method of claim 1, wherein the synchronization request message includes an old data object corresponding to the data object prior to the execution of the action and the validating step comprises the step of:

comparing the old data object to a second data object, in the remote data

15    storage, corresponding to the data object.

6.    The method of claim 5, wherein the synchronization response message includes the copy of the data object if the old data object does not match the copy of the data object.

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7.    The method of claim 1, wherein the synchronization request message includes a first timestamp corresponding to a time the action was executed on the data object and the validating step comprises the step of:

comparing the first timestamp with a second timestamp on a second data

25    object, stored in the remote data storage, corresponding to the data object.

8.    A method of verifying an action taken on a data object stored on a local data storage of a wireless computing device, comprising the steps of:

generating a synchronization request message on a wireless computing

30    device, wherein the synchronization request message includes a copy of a data

object on a local data storage, an action that has been taken on the data object, and an old data object corresponding to the data object prior to when the action was taken;

transmitting the synchronization request message from the wireless computing device to a server;

processing the copy of the data object on a remote data storage on the server based upon business logic corresponding to a domain of the data object and defined by a user of the wireless computing device.

9.     The method of claim 8, further comprising the steps of:

generating on the server a synchronization response message based upon a result of the processing step;

transmitting the synchronization response message to the wireless computing device; and,

resetting the data object to the value of the old data object if the synchronization response message indicates that the processing step was not successful; or

setting a status corresponding to the data object to a value of "updated" if the synchronization response message indicates that the processing step was successful.

10.    The method of claim 8, the processing step comprising the steps of:

validating the copy of the data object; and, if the validation is successful,

updating a second data object, in the data storage of the server, corresponding to the data object.

11.    The method of claim 10, the validating step comprising the step of:

comparing the old data object to the second data object.

12.    The method of claim 10, wherein the synchronization request message includes a first timestamp corresponding to the data object and the validating step

comprising the step of:

    comparing the first timestamp with a second timestamp corresponding to the
second data object.

5       13.    The method of claim 8, wherein the wireless computing device is a personal
digital assistant (PDA).

        14.    The method of claim 8, wherein the wireless computing device is a
computer.

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        15.    A distributed data storage system, comprising:

            a wireless computing device, comprising:

                a local data storage;

                logic for generating a synchronization request message, comprising:

15                  a copy of a data object corresponding to a data object stored
                in the local data storage;

                    an action corresponding to an operation performed on the
                data object; and

                    an old data object corresponding to the data object prior to
20              when the operation was performed on the data object;

            a server, comprising:

                a remote data storage;

                business logic for processing the synchronization request message,
            wherein the business logic is defined by a user of the wireless computing
25          device and corresponds to a domain of the data object.

        16.    The distributed data storage system of claim 15, the business logic
comprising:

            validation logic for determining whether or not the action can be executed
30      on a second data object in the remote data storage and corresponding to the data

object;

logic for executing the action on the second data object when the validation logic determines that the action can be executed on the second data object; and

conflict resolution logic that executes when the validation logic determines

5      that the action can not be executed on the second data object.


17.      The distributed data storage system of claim 16, the validation logic comprising:

logic for comparing the old data object to the second data object.

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18.      The distributed data storage system of claim 16, wherein the synchronization request message includes a first timestamp corresponding to the data object and the validation logic comprises:

logic for comparing the first timestamp to a second timestamp

15      corresponding to the second data object.


19.      The distributed data storage system, wherein the wireless computing device is a personal digital assistant (PDA).


20      20.      The distributed data storage system, wherein the wireless computing device is a computer.